#### County Responses to Written Comments Received on the Draft Little Bear Creek Basin Plan

Snohomish County held a public meeting on June 21, 2017 to receive comments on the draft Little Bear Creek Basin Plan. Comments were received from the public and governmental entities with jurisdiction within the study area, from comment cards distributed in the meeting, and by email. The comment period on the draft Little Bear Creek Basin Plan ended July 6, 2017. The comment period was extended to July 14, 2017 for minor revisions to Appendix B to the draft Little Bear Creek Basin Plan. Table A below lists comments that were received from comment cards at the June 21, 2017 public meeting. Table B lists comments that were timely received after the June 21 public meeting. The County acknowledges and appreciates all comments received. Responses were provided when requested, or when the comment addressed a specific aspect of the draft Little Bear Creek Basin Plan.

#### Table A. Comments Submitted on Comment Sheets at 6/21/17 Public Meeting and Follow up

Commenter #	Response requested?	Question 1: Do you have any suggestions that you think are important to include in this plan?  Question 2: What do you believe should be our measure of success?  Question 3: What's one action that you'll do to protect water quality?
1	No	Comment 1: (None) Comment 2: Staying on course Comment 3: Remind neighbors to pick up after their pets
2	No	Comment 1: 1. Define the acronyms (example LID, B-IBI). 2. How to contact county officials for asking for mitigation fees from builders both residential and builders.  Comment 2: Success= native species surviving and thriving.  Comment 3: Eliminate roundup use.  County's response to Comment 1:  A list of "Acronyms and Abbreviations" has been provided in the Little Bear Creek Basin Plan Report. Mitigation fees (also

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		called impact fees), relating to transportation impacts of development projects are evaluated during permit review, and inquiries may be directed to the Snohomish County Planning and Development Services permit reviewer.
3	Yes	Comment 1: The basin plan extends out to 2030 and depends on \$308M in as- yet, undesignated funding. But the reality of the UGA is that industrial development pressure is a much more immediate reality. The basin is going to get further behind before mitigation can start righting things.  Comment 2: (None)  Comment 3: (None)
		County's response to Comment 1, sent via email:  The County Comprehensive Plan update that was adopted in 2015 goes through 2035. The Little Bear Creek Basin Plan has an aggressive water quality program proposed for implementation over 30 years, based on the adopted comprehensive plan developed to full build out. What the modeling shows is that in the new development areas, the recently adopted development standards, that include stormwater controls, do reasonably well in providing mitigation. But areas with older, existing development, need more retrofit investment to catch up. It is expensive at an estimated \$308 M. In terms of land use designations, in terms of development standards and codes that are in place, if things go according to those projections, then water quality compliance can be achieved. The basin plan also proposes an adaptive management element that can help address the pace of development, and whether the plan is tracking its objectives. The plan proposes monitoring for B-IBI (benthic index of biotic integrity) and water quality monitoring, and plan adaptation as needed at the end of each phase.
		Commenter #3 follow-up comments, sent via email:  Thank you for your quick synopsis of part of my testimony at the hearing. You did capture a quick synopsis of the problem I posed, but you did not capture my follow-on (which coincided with the testimony of others) regarding the cost

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		of mitigation and the challenge that your entire plan is, as yet, unfunded. I and others suggested that mitigating damage done is the expensive way to address problems and the plan has no details on proactive solutions like increased enforcement. I suggest that the lack of the will/capacity to effectively enforce code on businesses is the Achilles heel of Snohomish County growth planning, and the situation near our part of Little Bear Creek (along 58th Ave SE) is a prime example. Rather than bury this issue in a comments page, I suggest that there is one very strong action that the Little Bear Creek Basin Plan can take. The County is not comfortable with its lack of will/capacity to enforce code when businesses are involved, but EVERY person that I talked to at the hearing who had business contact / investigation responsibilities told me there was only so much one or two people could do. You plan lists 7 or 8 "Activities" that could be undertaken to mitigate surface degradation, one of which focused on businesses and ALL the rest were home owners behavior focus points. While there is indeed County oversight and coordination for all of those Activities, the list noticeably lacked any activities that specifically called County behavior changes, and a very clear County behavior change is to increase the resources and commitment to enforce existing code that protects surface water quality. I think it's important that County Planning clearly shows there is an intent to enforce. Listing the enforcement challenge up front and embellishing on it in the body of the plan is a very important step!
		County's response to follow up comment:  The Business Inspection program is one of these inspection services, which inspects businesses to ensure that their operations employ BMPs and, if needed, there is Code Enforcement backup. Surface Water Management (SWM) is currently in the process of developing a division-wide Business Plan, and your comments about increased enforcement will be considered, along with other possibilities for improving SWM services. For Little Bear Creek specifically, the Basin Plan proposes to conduct a source study in the initial phase, in order to better understand sources of fecal coliform, and determine the appropriate methods and programs to address such sources. Depending on study results, this could include increase enforcement, and possibly include coordination with other agencies that have special jurisdiction in the basin (e.g., Snohomish Health District, water and sewer districts, and Snohomish Conservation District).

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		Comment 1:	Improve inspection & enforcement of the current discharge by business; Focus on mitigating pollution w/development management & pre-development strategies, not post build-out mitigation.
		Comment 2:	Reduction in pollution up front, so less mitigation is required post development.
4	No	Comment 3:	Focus this question on businesses & developers. In Addition to the landowners; up front mitigation is the key. BTW why isn't the county generating sufficient revenue through permitting and fines to fund enforcement?
		County's resp	onse to Comment 3:
		_	ment is an administrative support function and not typically funded by permit fees. Permit fees pay for dministration of permits.
_	No	Comment 1:	Help from homeowners to clean up the creek. Not making permits so expensive for homeowners to redo bridges especially of they are making water quality better.
5		Comment 2:	(None)
		Comment 3:	I will start when you start.
	No	Comment 1:	Very good presentation.
6		Comment 2:	Cleaner, Lower temp water ability to not let over development in the basin area or any new development.
		Comment 3:	Already keep water from drainage.

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		Comment 1: More detail on the economic analysis would be helpful. Discounting future costs to present value requires a discount rate this can be justified. So, what is the discount rate used and why?
		Comment 2: (None)
7 (Ecology)	No	Comment 3: (None)
		County's response to comment 1:
		More detail is provided in Section 5.2 of the Little Bear Creek Basin Plan Report. Please also see email response in Table B, commenter #1 (Ecology).
		Comment 1: Include the light industrial area in the UGA in East Maltby Pacific Topsoils sits on the headwaters of Cutthroat Creek.
		Comment 2: (None)
8	No	Comment 3: I keep all toxins/pollutants off my property.
		County's response to comment 1:
		The study area includes UGA that drains into Cutthroat Creek. The business indicated was located, and included in the study area.

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		Comment 1: I see the road run off in the rain. There are so many cars on little country roads. Does this heavy road use get addressed on water issues. Also, so many cars being washed at home in the driveway, is this a problem?
		Comment 2: I could not figure out what water quality is in your plan? I would like to see all the salmon back, a nice clean creek safe for humans to be near.
		Comment 3: I have started changing my lawn care practices. The class on that were (sic) very helpful!
9	No	County's response to comment 1:
		Road runoff was modeled as runoff from impervious surface. Specific activity from developed areas, such as car washing, was not explicitly modeled, but was implicitly modeled in the calibration.
		County's response to comment 2:
		The water quality standards and targets are discussed in Chapter 4 of the Little Bear Creek Basin Plan Report. The applicable water quality standards are for temperature, dissolved copper and dissolved zinc, and fecal coliform. The study targeted a 90% of forested condition for B-IBI (Benthic Index of Biotic Integrity), which is an indicator of aquatic health based on hydrologic metrics.
10	No	Comment 1: Do not expand UGB (sic*) into watershed
10	INO	(*Note: "UGB" understood to mean "UGA")

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		Comment 2: Fix—Fecal coliform, Temp, BIBI.
		Comment 3: Maintain forest on my property.
		County's response to comment 1:
		The future build out scenario was based on the 2015 Snohomish County Comprehensive Plan and included no UGA expansion in the Little Bear Creek study area.
		Comment 1: Questions:
		(1) What % current lack of quality is due to commercial vs residential?
		(2) Do the modeled strategies involve regs for businesses or home owners?
		(3) How will regs be enforced?
11	Yes	(4) Is the 30 year plan subjected to changing political positions?
		(5) What is the likelihood that the modeled strategies will be put into practice?
		Comment 2: Businesses should be regulated if needed, esp if they contribute to the problem increasing.
		Comment 3: Maintain Septic System.
		County's response to Comment 1, sent via email:
		(1) The modeling was not designed that way; it was oriented toward modeled compliance among the 9 major subbasins, with water quality standards for temperature, fecal coliform, dissolved copper, and dissolved zinc, and evaluating for

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		aquatic biological health using the relationship between stream flow and B-IBI (Benthic Index of Biotic Integrity). We found that the dissolved metals would not be a problem in the future build-out scenario, and the other parameters would fall short of water quality standards and targets. The solutions were built up starting from flow controls and a voluntary buffer program. B-IBI targets were achievable in all subbasins; however, additional infiltration was needed to mitigate temperature in the West Trib subbasin. In the West Trib subbasin, there was a stretch of stream/ditch along the south side of 196 <sup>th</sup> Street, where buffer restoration did not appear feasible. Additional structural controls were needed, to infiltrate warm flows in the early fall. With regard to fecal coliform, we're not sure of the sources, whether residential, commercial, natural, or other. So, we propose to do a fecal source study as one of the first steps of the Little Bear Creek Basin Plan. This is to help us better understand where and what the problem source(s) might be, so that we may know the specific actions that would be needed. Different subbasins in the Little Bear Creek basin have different per-acre cost estimates for improving stormwater quality under the Little Bear Creek Basin Plan. Some of the highest and lowest per-acre costs can be found in areas that are predominantly residential (e.g., Little Bear Creek-Upper has the highest at \$60k/acre, and Trout Creek has the lowest at \$20k/acre), and areas that have large commercial influence are about in the middle (Little Bear-Lower-228 <sup>th</sup> has \$40k/acre and Little Bear Lower-County Line has \$30k/acre). Getting to the reasons for these cost differentials could take further investigation and analysis that would go beyond the current study scope.
		(2) Recently adopted development standards and stormwater regulations were assumed for new development* in the future build-out scenario. Some possible additional development regulations were considered as potential alternative strategies, and were modeled, but were not selected for the basin plan.
		(3) As noted in the response to question 2, recently adopted development standards and stormwater regulations were assumed for new development in the future build-out scenario, and would be subject to enforcement. No additional development regulations are proposed under the basin plan.
		(4) Implementation of the basin plan will be heavily dependent on grant funding, which may be influenced by legislative or other actions affecting grant agencies. The basin plan as proposed would be periodically monitored and adaptively

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		managed to achieve water quality standards and targets.
		(5) The permit itself does not require the implementation of this plan. However, the county will continue to work on projects in the Little Bear Creek Basin that are part of the Public Works Surface Water Management (SWM) capital improvement and education and outreach programs, incorporating the Plan guidance as projects are prioritized. Some of the modeled strategies may, then, be implemented. However, the timeframe for full implementation of the Little Bear Creek Basin Plan will be dependent on grant funding availability, as noted in the plan report.  *Note: new development includes both residential and commercial/industrial (note added after email was sent).

## Table B. Comments Submitted via email after 6/21/17 Public Meeting

Commenter	Date	Comment
#	Submitted	
1 (Ecology)	7/5/2017	I am curious to learn more of the Present Value (PV) cost estimates. Can you tell me the discount rate used in calculating the PV of the costs in 2016 dollars?
		County's response:
		Responding to the question about the "discount rate" used, please see the Draft Little Bear Creek Basin Plan, Appendix C: Stormwater Strategies Report, in Appendix B of the Stormwater Strategies report, where there is a memo documenting the information that was assembled to support the SUSTAIN modeling, which included cost data for modeled structural strategies.
		In the tables on each type of BMP (e.g., "Filter Strips in ROW," attached), Present Value factoring was used for BMPs funded and operated over a 30-year life cycle, in order to reflect total costs to the extent practicable, and to bring all such costs to 2016 dollars. The present value estimates include initial construction, annual maintenance, replacement costs (if applicable for those BMPs with effective life less than 30-yrs), and land cost (if applicable for those BMPs where it was assumed the County would need to acquire private property).
		The NPV (Net Present Value) Factor, which is essentially a discount rate, was a combination of an annual Inflation Rate of 2.5%, and a Bond Interest Rate of 3.8%. These rates were based on input from our County finance department and our consultant's financial advisors.
		Using the example "Filter Strips in ROW" (where ROW stands for Right-of-Way), the NPV Factor is the product of the inflation factor and bond interest rate factor for any given year. For example, in the 30th year (last row of the table):
		2.10 (Inflation Factor) x 0.33 (Bond Interest Rate) = 0.69 (NPV Factor)
		(The "Bond Interest Rate" factor for each year was calculated using the formula " $1/((1 + [3.8\%])^{(year]})$ ". Note that the last column in this row shows the cost as "\$0.00". The actual value in the spreadsheet is \$0.001, but what is shown is rounded to dollars and cents.)
		The NPV Factor was used to calculate total lifecycle cost, as follows:

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		Construction and Design Cost = \$2.56/sf (\$1.70/sf for Construction and \$0.86/sf for design)  (NPV = \$2.56 x 1 = \$2.56)  Annual O&M: \$0.002/sf
		Replacement Cost for this BMP is \$0, assuming it has an effective service life of 30 yrs.  NPV of Annual O&M over lifecycle = \$0.002 x 1.00 + \$0.002 x 0.99 + \$0.002 x 0.98 + + \$0.002 x 0.34 + \$0.002 x 0.33 = \$0.05165/sf (rounded to \$0.05/sf)
		Total lifecycle cost = \$2.56/sf + \$0.05/sf = \$2.61/sf (in 2016 dollars)
		For costs assumed to be paid in cash with no financing (e.g, in-stream strategies, source study, street-sweeping, outreach), a simplifying assumption was made, that the inflation rate and discount rate would be about the same, so no adjustment was made—all costs are in 2016 dollars.
2 (WSDOT)	7/6/2017	Suggested revisions related to Table 21, Implementation Plan and Phasing:
		1. Add the word "County" to the last column of this table, so it reads, "Estimated County Cost (rounded)"
		2. Within this table, where it says "WSDOT: Project development and construction" add the words "(when triggered by HRM) in three locations:
		O Under Fecal Coliform, Structural Supplemental Strategies  O Under Fecal Coliform, Structural Supplemental Strategies
		<ul> <li>Under Temperature, Retrofit: additional/updated facilities</li> <li>Under Temperature, Supplemental Strategies/Additional BMPs</li> </ul>
		3. Ensure that HRM is defined in table and text as "Highway Runoff Manual"
		County's response:
		(1) The planning level costs are estimated for the Basin Plan and are not specifically County costs, and the column header label is appropriate. Upon further discussion with the commenter, it was clarified that the concern was that the table should indicated that costs are planning level, and should not be considered based on specific projects designed to site conditions. This understanding is acknowledged, and clarifications are made in the cost estimate tables in the Basin Plan Report. However, all actions will be subject to funding availability. Please see the Section 6.2 of the Basin Plan

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Comments from public agencies are identified by agency name in the "Commenter #" column. County responses are in italics.

Commenter	Date	Comment
#	Submitted	
		report for discussion of responsible parties.
		(2) The suggested revisions will be made.
		(3) The suggested revision will be made.

#### **Commenting Public Agencies:**

Ecology: Washington State Department of Ecology

WSDOT: Washington State Department of Transportation